

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/JP02/13858

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ A61K38/40, 38/16, 9/14, 9/16, 9/20, 9/48, A61P1/16, 3/04,
3/06, 3/10, 9/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ A61K38/00-38/58, 39/395, A61K9/00-9/72, 47/00-47/48

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho 1926-1996 Jitsuyo Shinan Toroku Koho 1996-2002
Kokai Jitsuyo Shinan Koho 1971-2002 Toroku Jitsuyo Shinan Koho 1994-2002

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
CA/MEDLINE/BIOSIS/EMBASE (STN), WPI/L (QUESTEL), JICST FILE (JOIS)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 05-176713 A (Morinaga Milk Industry Co., Ltd.),	1-3, 7, 9-11, 15
Y	20 July, 1993 (20.07.93), Full text; particularly, Claim 1 (Family: none)	4-6, 8, 12-14, 16
X	JP 2000-325046 A (Meiji Milk Products Co., Ltd.), 28 November, 2000 (28.11.00),	2, 3, 7, 10, 11, 15
Y	Claim 1; Par. No. [0011] (Family: none)	4-6, 8, 12-14, 16
Y	JP 2001-048808 A (Morinaga Milk Industry Co., Ltd.), 20 February, 2001 (20.02.01), Column 11; example 3 (Family: none)	4-6, 8, 12-14, 16

☒ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
27 March, 2003 (27.03.03)

Date of mailing of the international search report
15 April, 2003 (15.04.03)

Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 00/22909 A2 (BIOTECH AUSTRALIA PTY. LTD.), 27 April, 2000 (27.04.00), Abstract; Claim 32 & AU 200010712 A	5, 6, 13, 14
Y	WO 91/04015 A1 (BUKH MEDITEC A/S), 04 April, 1991 (04.04.91), Claim 45; page 27 & JP 5-500668 A & AU 9065051 A & US 5213808 A & EP 493513 B1 & DE 69009769 E & JP 2927950 B2	5, 6, 13, 14
Y	WO 98/44940 A1 (AGENNIX, INC.), 15 October, 1998 (15.10.98), Claim 1; page 17, lines 16 to 17 & AU 9869647 A & EP 979099 A1 & CN 1262625 A & MX 9909240 A1 & JP 2001-519815 A & NZ 500712 A	5, 6, 13, 14
Y	EP 955058 A1 (MORINAGA MILK INDUSTRY CO., LTD.), 10 November, 1999 (10.11.99), Test; examples & WO 98/30235 A1 & KR 2000070051 A & US 6319895 B1	4, 8, 12, 16
A	JP 2000-198739 A (Tokiwa Chemical Industries, Ltd.), 18 July, 2000 (18.07.00), Par. No. [0002] (Family: none)	3

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Box I Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 17-26

because they relate to subject matter not required to be searched by this Authority, namely:

Claims 17 to 26 pertain to methods for treatment of the human body by therapy and thus relate to a subject matter which this International Searching Authority is not required, under the provisions of Article 17(2)(a)(i) of the PCT and Rule 39.1(iv) of the Regulations under the PCT, to search.

2. ☐ Claims Nos.:

because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:

because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

<Concerning clearness of invention>

(1) Claims 1 to 16

Although the expression "lactoferrin proteins" is given in claims 1 to 16, lactoferrin and conalbumin are exclusively cited as specific examples of the lactoferrin proteins in the description. Moreover, it is not clearly defined what compounds correspond to the "lactoferrin proteins". Even though the common technical knowledge is taken into consideration, a person skilled in the art cannot clearly understand what specific compounds other than lactoferrin and conalbumin belongs to the category of the lactoferrin proteins. Thus, claims 1 to 16 fail to fulfill the requirement of clearness of invention in the meaning as described in PCT Article 6.

(2) Claim 8

Based on claim 8, it cannot be clearly understood whether the invention according to this claim is an invention of a production process or an invention of a composition. Thus, claim 8 fails to fulfill the requirement of clearness of invention in the meaning as described in PCT Article 6.